

F.O.G. (Fats, Oils, & Grease) Program Manual



Carmel Utilities,

in accordance with the National Pretreatment Program set forth by E.P.A. regulations (40 CFR 403), has hereby enacted a program for the controlling of Fats, Oils, and Grease discharges from Food Service Establishments.





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Program Introduction

The City of Carmel has adopted a Fats, Oils, and Grease (FOG) Control and Pretreatment Program to assist with FOG prevention. FOG is a substance that is created from food scraps and waste, or petroleum wastes. It damages the city sewer system, creates blockages, and it is one of the main causes of sewer overflows.

The city spends thousands of dollars per month to perform extra maintenance on its sewer system due to excess FOG. The FOG Program provides preventive guidelines for businesses and non-residential sewer users that generate FOG.

This manual provides information about FOG and how it can be controlled to comply with local and federal regulations. Also included are three informative posters for your facility. Please educate your employees, and post these as a reminder to follow these Best Management Practices.

The City of Carmel wants to work with you to prevent FOG problems from affecting your business or the community's sewer system. If you have any questions regarding this program, please call the Utilities office at (317) 571-2443.

Thank You





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FOG Management Policy

Foreword

According to the National Restaurant Association, “Cooking grease in wastewater discharged from apartment buildings, restaurants, and hotels is causing fats, oil, and grease (FOG or grease) blockages in sewer lines. These grease blockages, located in either the property owner’s sewer lateral or the public agency’s sanitary sewer system, can cause back-ups into kitchens or basements, or can lead to sanitary sewer overflows (SSOs) which can cause untreated sewage to flow onto streets and travel to storm drains, creeks, and other surface waters. SSOs have become the focus of many large lawsuits and a Report to Congress by the EPA in 2004. This has made the control of grease blockages a high priority for the EPA and many states which are now requiring municipalities to adopt FOG Control Programs that include controlling FOG discharge from restaurants.”

Management Program

For these reasons, the City of Carmel Wastewater Utility is establishing a FOG Management Program and implementing a FOG Management Policy in order to reduce or prevent sanitary sewer blockages, and to reduce costs and maintenance associated with excessive FOG discharges. The FOG Management Program will survey FOG facilities and identify problem areas, encourage FOG generators to reduce FOG discharge through best management practices, and monitor FOG discharge to the sewer system.





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FOG Management Policy

Under the Management Program, City personnel or authorized agents will:

- Conduct outreach and educational activities with users;
- Check FOG control device maintenance records;
- Determine compliance with the City's FOG Management Policy through facility inspections;
- Identify issues of noncompliance;
- Specify necessary corrective actions;
- Issue Notices of Noncompliance;
- Recommend punitive actions that may include surcharges, fines, and/or termination of service.

Management Policy

The FOG Management Policy is supported by the City's current sewer use ordinance, which states "No person shall discharge to the sewerage system wastes which cause, threaten to cause, or are capable of causing either alone or by interaction with other substances: obstruction of flow in the sewerage system or injury to the system or damage to the wastewater collection, treatment, or disposal facilities..." Under the FOG Management Policy:





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FOG Management Policy

Device Requirements

- All food service establishments or other industrial or commercial enterprises shall provide grease removal devices when, in the opinion of the City, they are necessary to prevent excessive amounts of FOG from entering the sewer system;
- Required FOG pretreatment devices must be sized and configured according to common engineering standards for such devices in order to prevent excess discharge of FOG;
- All FOG pretreatment devices shall be located so that maintenance and inspections can be easily performed. The refusal of any FOG facility to allow City personnel entry for inspection will be considered a violation of this policy. The FOG pretreatment device manufacturer's recommendations regarding installation and maintenance must be followed;
- Accumulation of floatable and/or settled waste shall not exceed 25% of the total volume of a grease trap or interceptor unless otherwise recommended by the device manufacturer;
- Based upon review of all relevant information, the City may require repair, modification, or replacement of FOG pretreatment devices;
- The City must be notified before the installation or removal of any FOG pretreatment device, and before any modifications to plumbing that may affect the operation of such device;





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FOG Management Policy

Device Maintenance

- FOG device maintenance is the responsibility of the user, or the owner in the case of multiple users;
- Devices shall be maintained to not allow discharge of FOG concentrations that will cause excessive accumulation of materials in downstream sewer lines and/or manholes;
- All large-volume (typically outside and in-ground) grease control tanks shall be serviced in order to maintain minimum design capacity as needed, but at least once every 90 days;
- All small grease control devices (typically inside and above ground) shall be serviced as required to maintain minimum design capacity as needed, but no less than once per week;
- If the City determines that ground garbage is a factor in excessive accumulation of materials in downstream sewers or manholes, the City may require the removal of the garbage grinding device;
- The use of enzymes, detergents, or other emulsifying additives to clean or prevent the accumulation of FOG in a pretreatment device is prohibited;
- All FOG facilities must maintain written FOG pretreatment device maintenance records for three years. These records must include the facility's name and location, date and time of cleaning, service performed, person or company performing the service, and signature of facility personnel confirming service completion.



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Frequently Asked Questions

- **What is F.O.G.?**

- FOG is short for Fats, Oils, and Grease. FOG is found in many foods; such as meats, sauces, salad dressings, foods cooked in deep fat fryers, cookies, pastries, dairy products and many, many more.

- **Why is FOG a problem?**

- FOG in the sanitary sewer system coats the insides of the pipes, causing maintenance problems. The consequences include reduced sewer capacity and pipe blockages which can lead to sanitary sewer stoppages and overflows. These overflows are public health and environmental hazards, as well as a financial burden to residents, businesses, and the City. FOG can also damage equipment and appurtenances vital to the proper operation of the wastewater utility.

- **Do I need a grease trap or interceptor?**

- If you discharge FOG to the sewer system, then it is likely that you will be required to install either a grease trap or grease interceptor.

- **I don't use grease; do I still need a grease trap/interceptor?**

- Yes. Even if you don't fry foods, your restaurant/business is still contributing to the FOG problem if you don't have proper preventive devices in place and maintained. Washing dishes and silverware, or food preparation utensils, adds FOG waste to our sewer system.

- **Who determines if I need a grease trap/interceptor?**

- During new construction or remodel, you may be required to install a grease trap or grease interceptor in accordance with the current plumbing code. Existing businesses may be required to install a device by the sewer utility in order to comply with their FOG control plan.





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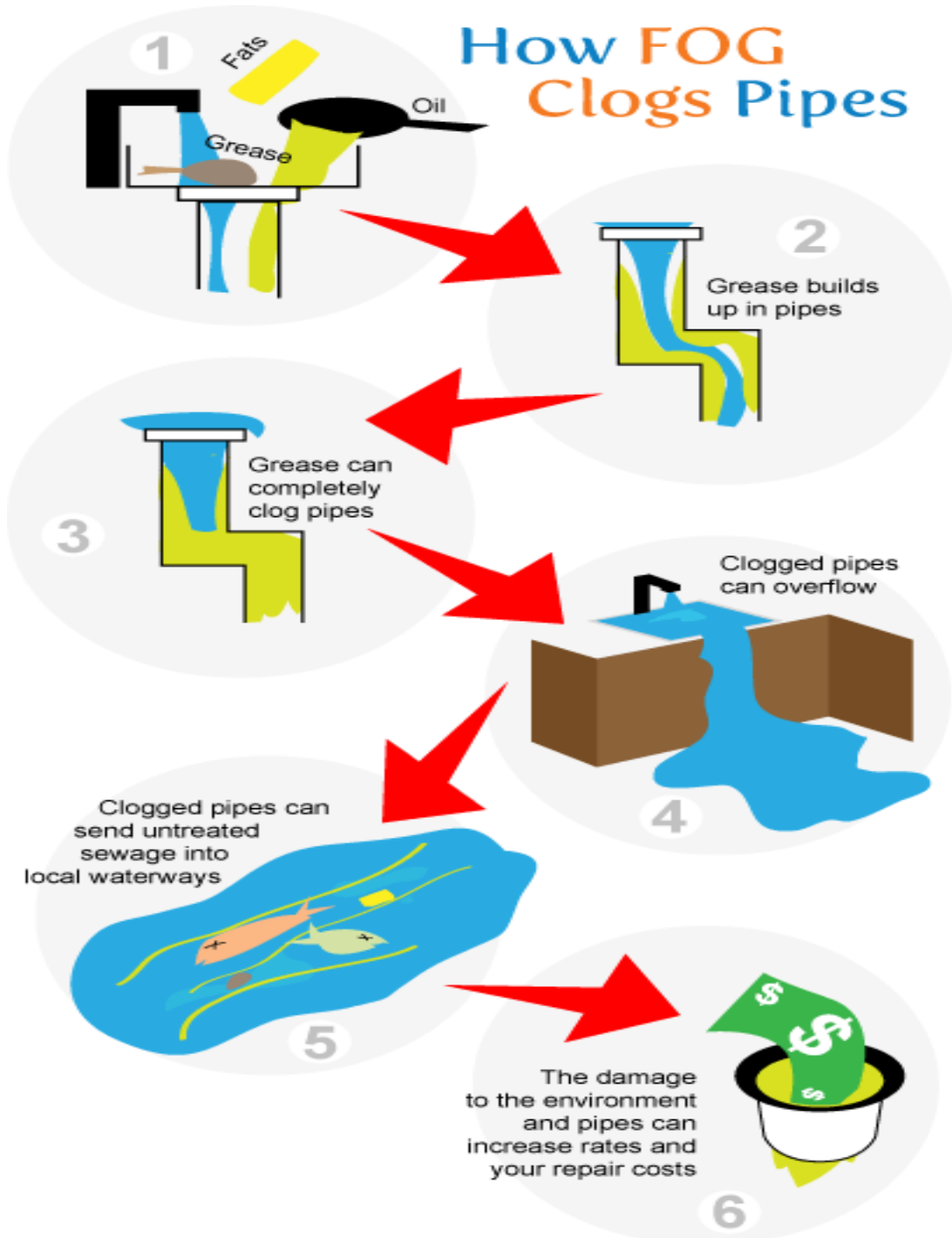
Frequently Asked Questions

- **What is the difference between a grease trap and a grease interceptor?**
 - The two significant differences between them is size and location. A grease trap is a small device that is located inside the facility, generally under a sink. A grease interceptor is a vault with a minimum capacity of around 600 gallons and is generally buried outside the facility. Both are designed as a holding device that allows the fats, oils, and grease to separate from the water, congeal, and rise to the surface to be removed rather than be introduced into the sewer system.
- **What is a FOG Control Plan?**
 - The FOG control plan is an agreement between the business owner and the city regarding the use of Best Management Practices and maintenance and cleaning schedules for grease retention devices. The FOG control plan also provides the city with information about the business and potential FOG producing activities.
- **Why do I need a FOG Control Plan?**
 - FOG causes many problems in the sewer system and the FOG control plan helps outline strategies to reduce FOG problems. Therefore, FOG control plans are required for businesses that have the potential to introduce FOG in the sewer system.
- **What are BMPs?**
 - B.M.P. stands for Best Management Practice. BMPs are useful for reducing the amount of FOG that goes down the drain, thereby reducing the risk of clogged pipes and sanitary sewer overflows. A great example of a BMP is wiping excess grease and food wastes out of pots, pans, and dishes before washing them.



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Why should I care about FOG control?





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Why should I care about FOG control?

The Good,



The Bad...



...and the UGLY!!





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How to Maintain a Grease Trap

1. Trap should be cleaned prior to start of the business day.
(Grease will be congealed and easier to remove when the grease trap is cold.)
2. Remove access lid.
3. Remove and clean screening device, if applicable.
4. Using a dedicated scraping device, clean sidewalls and baffle plates. Put grease in a sealed bag or container, and discard in the garbage.
5. Using a mesh-type screening device, skim all floating grease, leaving the water behind. Put grease in a sealed bag or container, and discard in the garbage.
6. Measure the build-up of food particles at the bottom and remove if necessary. Liquid waste haulers are usually hired to vacuum the unit empty.
7. When the trap is completely empty, fill with **cold** water.
8. Replace screening device and ensure access lid is airtight.
9. Record the cleaning on the maintenance log form.

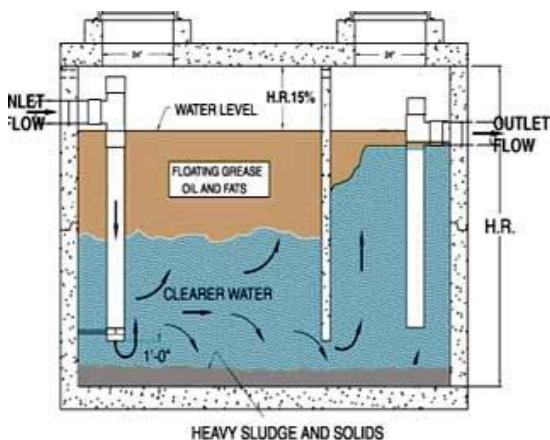




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Grease Interceptor Maintenance

1. There should be adequate access to manholes to provide easy access to the interior of the interceptor.
2. All grease interceptors shall be pumped out every 90 days. If it is observed that the interceptor capacity can handle the load for a period of greater than 90 days, contact Carmel Utilities to request a modification of the cleaning schedule.
3. All grease interceptors should be completely pumped out during every cleaning.
4. Make sure to schedule a cleaning when an employee of your establishment can be present to ensure that the interceptor is cleaned properly.
5. Once the interceptor has been completely pumped out, it should be filled by running **cold** water from within the establishment (not by decanting water from the pumping truck back into the interceptor).
6. Always ask for a manifest or receipt for each cleaning. Keep copies of these available for inspection, along with the cleaning log.
7. Limit unscheduled cleanings by using Kitchen Best Management Practices (BMPs), as advised within this manual.





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Best Management Practices

DO'S



1. **DO** scrape all food scraps and grease solids into the garbage.
2. **DO** collect excess frying grease in a separate container for proper disposal.
3. **DO** schedule regular cleaning for grease traps and interceptors.
4. **DO** inspect your grease interceptor/trap regularly to ensure it is working properly.
5. **DO** clean up grease spills with absorbent material (e.g. cat litter/oil-dry) and put into dry trash.
6. **DO** clean hood filters, floor mats, fry racks, etc. inside your kitchen.
7. **DO** dispose of mop water and carpet shampoo wastewater into your mop sink.
8. **DO** continue to train employees and educate them on the importance of following these BMPs.
9. **DO** call 317-571-2477 for additional information.



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Best Management Practices

DON'TS



1. **DON'T** rinse off food scraps and grease from plates, pots, and pans using hot water, and flush it down your kitchen drain.
2. **DON'T** pour FOG (salad oils, butter, shortening, grease, cooking oil, soups, etc.) down your kitchen drains.
3. **DON'T** put enzymes or other additives directly into grease interceptor/trap in an attempt to reduce cleaning schedule.
4. **DON'T** wait for city inspectors to tell you to clean your grease interceptor/trap.
5. **DON'T** use water to spray down grease spills into an outside drain.
6. **DON'T** clean greasy equipment outside.
7. **DON'T** dump mop water or carpet shampoo wastewater outside.
8. **DON'T** get lost in the FOG.



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Best Management Practices

1. Inform Employees about BMPs



5. Scrape Food and Grease off Plates and Cookware



2. Limit Garbage Disposal Usage



4. Collect and Render Yellow Grease



3. Use Floor and Sink Drain Screens



1. **Inform Employees about Kitchen Best Management Practices.** Employees should be trained to implement BMP's and/or to properly clean out grease control devices such as grease traps.
2. **Limit Garbage Disposal Use.** Garbage Disposals allow food mass to enter the sewer system.
3. **Use Drain Screens** to prevent food particles and grease from entering the sewer.
4. **Keep grease out of the drains by collecting and rendering yellow grease.** The more yellow grease that is rendered, the less grease that ends up in drains, grease traps and interceptors.
5. **Scrape** grease and food from plates and cookware into the trash before washing.
6. **Wipe** up food or grease spills with disposable rags before mopping.
7. **Maintain a cleaning log** for interceptors and traps.



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Best Management Practices

LIMIT GARBAGE DISPOSAL USAGE

Use a Trash Can Instead





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Best Management Practices

WIPE DISHES CLEAN

Before Rinsing





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For Additional Information

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